

## DISCUSSION GROUP T2 (JOINTLY WITH P6) ON MONITORING VIBRATION AND OTHER CRITICAL MACHINE CONDITIONS



**Ronald B. (Ron) Adams**, Coordinator, is Global Portfolio Manager - Petroleum, with Sulzer Pumps in Houston, TX. He works with product development on new product definition and provides global product support. He has been with Sulzer since 1991 and has held various sales, marketing, and alliance management positions. Previously, he was with Ingersoll-Rand for over 18 years in pumps and hyperpressure equipment businesses.

Mr. Adams received his BS degree (Mechanical Engineering Technology, 1974) from Southern Technical Institute (summa cum laude) and studied toward his MBA at Georgia State University. He is a member of the ISO 13709 / API 610 Joint Working Group, API 676, and API 685 subcommittees.



**Stephen R. (Steve) Locke**, Coordinator, is a Senior Consultant in DuPont Engineering Technology Rotating Machinery Group in Old Hickory, TN. He had plant assignments in the Petrochemical Department starting in 1972 for technical assistance to operations and maintenance including responsibility for startup and oversight of several large process compressors and other equipment. More recently, Mr. Locke has also been leading a corporate effort to identify machinery credible failure modes and appropriate steps to quantify and manage safety risk.

Mr. Locke received a BS degree (Mechanical Engineering, 1972) from Purdue University and is a member of ASME. He has been active on the Turbomachinery Symposium advisory committee, and represents DuPont on the Texas A&M Turbomachinery Research Consortium.



**William D. (Bill) Marscher**, Coordinator, has spent his career of over 30 years involved in the design, development, and troubleshooting of compressors, turbines, pumps, and other turbomachinery. His capabilities and experience include finite element analysis, rotordynamic analysis, vibration testing, predictive maintenance, and mechanical design, including the design of advanced (including magnetic) bearings and seals.



**Mike Pepper**, Coordinator, is Chief Machinery Engineer for ExxonMobil Upstream, based in Houston, Texas. As a Senior Consultant and mentor for the worldwide machinery community, he supports the Production, Development and Research divisions of the company. He has 34 years O&G experience, through working onshore, offshore, Middle East, Africa, Far East, North America, and the North Sea. He has broad experience in Oil & Gas production, including power generation, water and gas injection, high pressure sour gas and LNG production. He specializes in gas turbine and centrifugal compressor performance analysis and currently focuses on research and qualification of new technology applications in machinery.

Mr. Pepper received a B.Sc. in Mechanical Engineering (1976) from Portsmouth, UK, and is registered as a C. Eng, Eur Ing and a member of FEANI.



**Paul A. Boyadjis** is Manager of Turbomachinery Analysis at Mechanical Solutions, Inc. (MSI), in Whippany, New Jersey. He has over 27 years of diverse experience in the analysis and design of rotating equipment. His specialty includes complex 3D solids modeling of pump and compressor casings and rotating assemblies, and the performance of stress and vibration analysis using advanced finite element techniques.

Mr. Boyadjis has worked as a lead analytical engineer for major compressor and pump manufacturers such as Ingersoll-Rand, Ingersoll-Dresser Pump, and Flowserve Corporation. Mr. Boyadjis has a BS and MS in Mechanical Engineering from Lehigh University. He is a member of the API Machinery Standards Committee and a Standards Partner of the Hydraulic Institute.



**Dag Calafell** has 35 years of experience with all types of rotating equipment within the Oil and Gas, Industrial Gas, and OEM arenas. His primary experience is with ExxonMobil where he is currently at EM Production Co. HQ in Houston responsible for machinery reliability and integrity programs worldwide, including Equipment Health Management and key supplier relations. He contributes to API machinery standards committees, e.g. the new Dry Gas Seal Std. 692. He has authored various papers and has two patents in seals and flow conditioning. He holds a BS and MS from Clarkson University (NY), and did post-graduate studies at Columbia University.



**Al Miller** is a Senior Upgrades Engineer at Flowserve Corp. He received his BSME from Pennsylvania State University in 1968.



**Maki M. Onari** is Manager of Turbomachinery Testing at Mechanical Solutions, Inc. (MSI), in Whippany, New Jersey. He is responsible for field vibration testing involving ODS and Modal analysis. His career spans more than 15 years primarily working with rotating equipment analysis and troubleshooting in the petrochemical, refinery, and power generation industries. Prior to joining MSI, Mr. Onari was a Rotating Equipment Engineer in PDVSA-Venezuela responsible for the predictive maintenance of one of the largest petrochemical complexes in Latin America. Mr. Onari received his B.S degree (Mechanical Engineering, 1996) from the Zulia University in Venezuela. He is a member of ASME and the ISO TC108/S2 Standards Committee for Machinery Vibration.



**Charles R. (Charlie) Rutan** is Senior Engineering Advisor, Specialty Engineering, with Lyondell Chemical Company, in Alvin, Texas. His expertise is in the field of rotating equipment, hot tapping/plugging, and special problem resolution. He has three patents and has consulted on turbomachinery, hot tapping, and plugging problems all over the world in chemical, petrochemical, power generation, and polymer facilities.

Mr. Rutan received his B.S. degree (Mechanical Engineering, 1973) from Texas Tech University. He is a member of the Advisory Committee of the Turbomachinery Symposium, and has published and/or presented many articles.



**L. E. (Ed) Watson** is a consultant with the DuPont Company in Houston, Texas. He works in the DuPont Engineering Technologies and Research Division of DuPont Engineering. His responsibilities include the specification and repair of turbomachinery and other rotating equipment, vibration and stress analysis, predictive maintenance and reliability improvement, process equipment application, and general engineering consultation on machinery and processes. Mr. Watson has been with DuPont for over 35 years and works on capital projects and engineering support of plant operations.

Mr. Watson has a B. S. degree from Lamar University and a M. S. degree from The University of Texas at Austin (both in Mechanical Engineering). He is active in the Vibration Institute and is past chairman of both the Triplex Chapter and the Houston Chapter of the Vibration Institute.